



# DX NEWS

The magazine of the  
National Radio Club

— SINCE 1933 —

Volume 57, No. 3 - Monday, Oct. 23, 1989 (ISSN 0737-1659)

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### DX test ...

WYST-1010, Baltimore, MD is conducting a DX test for the NRC on Monday, November 6, 1989 from 0330 to 0400 ELT, at 1000 watts non-directional. Send reports, and return postage, to Mr. Dan O'Neill, Program Director, WYST-AM - 1111 Park Ave., "The Penthouse" - Baltimore, MD 21201. Test arranged by Bob Harrison and the Colorado CPC Machine.

### From the Editor ...

A little DX from the heartland ... youse guys at the convention that perused the daytime bandscan list in the convention program and thought that hearing WSM-650 in broad daylight here in Topeka (where the ground conductivity is 30) was a fairy tale ... I have WSM, at 11:05 am, on tape now. And just to show that DX in Topeka is no joke, I taped WJR-760 at 12:05 pm. The kicker is that later in the afternoon someone at the new race track south of here, Heartland Park, apparently fed the PA system into a low-power transmitter on 650, where I could listen to race results all afternoon. No ID's heard, but I'll try to follow up and find out more. R. Taino continued on 1100 kHz, plus the regular freqs, all last week.

Don't forget to order your copy of the convention tape (on VHS) from Ernest J. Wesolowski - 13312 Westwood Lane - Omaha, NE 68144-3543, for \$15. \$5 of that goes to the club.

**DXChange ...** Your editor is still looking for a copy (or original) of the owner's manual for a Bearcat 250, or at least a copy of the programming instructions. Use the address on the back cover.

**From De Boss ...** Mike sez that Updater #3 is available for \$2.00, U. S. and Canada.

**GTG ...** Robert Kramer - 6416 N. Richmond - Chicago, IL 60645 (312) 262-6299, is reviving the old holiday GTG that disappeared after 15 years

of fun, on Dec. 29-Jan. 2. He says that DX'ers from Chicago as well as outside will be in attendance, and all are welcome. Those planning to sleep over at his place will find plenty of room but should bring sleeping bag and pillow. The all-nighter will be MM 1-1-90. Receivers and other DX-related items are welcome.

**My opinion ...** I've received several comments concerning my negative remarks about Howard Stern, not all in agreement with what I said. Outside of the facts that Mr. Stern reminds me of my more obnoxious children who are always trying to get attention, and that he is one of the most highly-paid radio personalities in the U. S., the man is a loose cannon. To be sure, the First Amendment protects free speech and keeps the FCC at bay from Mr. Stern and other shock jocks, as it should. But you can bet your seven-second delay that the FCC is listening and looking for other methods of putting the shockers on the unemployment rolls. I would hope that the management of the stations who air Mr. Stern and his ilk would turn to more wholesome, if more boring, fare, before the FCC and the courts intrude in radio's affairs, forcing upon them an unwanted solution. NAB stations - are you listening?

### DX Time Machine

#### From the pages of DX News

Twenty-five years ago ... from the Oct. 17, 1964 DXN: Thumper Peniston, Chester, NJ reported such Caribs as Jamaica-770, R. Belize-835, and 4VE-1035 ... John Callarman's "IDXD Supremacy Ratings" listed the top 20 DX'ers, in order: H. Tyndall, K. Mackey, A. Cushen, H. Holbrook, R. Anderson, K. Geary, B. Dangerfield, B. Botzum, S. Morss, S. Johnson, H. Gustafson, E. Cooper, D. Pope, P. Taylor, J. Gangler, R. Millar, H. J. Wilkinson, N. Maguire, G. Allen, R. Schiller, C. Freeman, and A. Rugg.

Ten years ago ... from the Nov. 5, 1979 DXN: The news of Hank Tyndall's death, in Florida, was reported ... Gene Martin, Denver, CO reported a carrier on 1566 from HLDA, South Korea, at 1024 10-8.

**THE WORLD'S OLDEST AND LARGEST ALL MEDIUM-WAVE DX CLUB**

# AM Switch

**Jerry Starr**

c/o WHOT Radio  
4040 Simon Road  
Youngstown, OH 44512-1320

Status changes in AM stations, supplied by the FCC and NRC members

## CALL LETTER CHANGES

Old call:	New call:	Old call:	New call:
690 WYIS PA Phoenixville	WPHE	1440 WOJL FL Lehigh Acres	WWCL
770 WWSS FL Lynn Haven	WFBN	1450 WQLL FL Sarasota	WSPB*
790 KOSY TX Texarkana	KKYR	WBIG NC Gastonia	WGNC
950 WBJW FL Orlando	WOMX	1460 KSO IA Des Moines	KGGG
1000 WZIP FL Jupiter	WEXI	1470 KFQX TX Abilene	KNTS
1170 WHXT MA Orleans	WKPE*	1480 WYDK NC Yadkinville	WDIX
1230 KCBN NV Reno	KRNO	KMEZ TX Dallas	KDBN
KDOV OR Talent	KSJK	1510 KACJ AR Greenwood	KZKZ
1320 KEMX UT Salt Lake City	KUTR	1520 WDBS GA Eatonton	WKVQ
1340 KSYX NM Santa Rosa	KSSR*	KSGO OR Oregon City	KFFX
1400 KILE TX Galveston	KTUS	1560 KFRS WA Sumner	KZIZ

Notes on calls: WKPE-1170 and WSPB-1450 reflect call changes that were set aside and never took place, stations retain their preset calls, WHXT and WQLL were never used by the respective stations. KSYX-1340 has been reported to be silent, change to KSSR may signal this station returning to the air.

## APPLICATIONS / GRANTS FOR NEW STATIONS

None

## APPLICATIONS FROM EXISTING FACILITIES

- 650 KMTI UT Manti: day power to 10000 (650 CP, station still on 1590 kHz)
- 770 WWBC FL Cocoa: night power to 480 watts (for 770 CP, still on 1510 kHz)

## GRANTS TO EXISTING FACILITIES

- 570 WGMS MD Bethesda: relocate XR
- 1160 WJJD IL Chicago: reduce night power to 5000 watts
- 1360 KASH CA Modesto: reduce night power to 950 watts
- WMNE WI Menomonie: to 880 kHz with 10000/210 U2
- 1400 WPRY FL Perry: relocate XR

## OTHERNESS

- 550 KLLV CO Breen: station is now here, ex-1560 kHz
- 750 KKNO LA Gretna: new station is ON THE AIR with black gospel format
- 840 KWPB NE West Point: CP for 5000 watts is ON THE AIR
- 1110 WKEG PA Washington: silent station is back ON THE AIR
- 1130 KOFK NM Milan: new station is ON THE AIR
- 1450 WPSE PA Erie: station is ON THE AIR, frequency had been vacent since WEYZ moved to 1330 kHz, operated by PA State University
- 1510 KCCV MO Independence: move to 760 kHz expected in "60 to 90 days"
- 1520 WTHE NY Mineola: application for power increase/fulltime has been DENIED
- 1550 WCXJ PA Braddock: silent station is back ON THE AIR

THANKS to the following NRCers who contributed: JOHN MALICKY (1990 Convention Host!) and WAYNE HEINEN

73 and Good DX, *Jerry & BKF* Jerry Starr & Buffalo K. Foonman

## Radio Roundup ... by Pete Kemp

The Beesley Broadcast Group recently made radio history in their own way by purchasing KRTH AM/FM from RKO in Los Angeles for a record sum of 86.6 million dollars.

Today in Rock History, a ten year fixture at Westwood One's Source has switched networks to the CBS RadioRadio network.

# Station Address Changes

**Jerry Starr**

c/o WHOT Radio  
4040 Simon Road  
Youngstown, OH 44512-1320

Supplied by NRC members and other sources

630 WMBE GA SAVANNAH	Zip Code Change Only - 31498	RV-VA
900 WSEA DE GEORGETOWN	701 NORTH DUPONT HIGHWAY 19747	BH-NJ
920 CKCY ON SAULT STE. MARIE	111 ELGIN STREET, SUITE 101 P6A 6L6	BH-NJ
930 WAUR IL SANDWICH	52 WEST DOWNER PLACE, ROOM 206 AURORA, IL 60506	GHD-WV
1020 WPJC PR ADJUNTAS	APARTADO 982 00601	DA-SW
1330 WHAZ NY TROY	30 PARK AVENUE, COHOES, NY 12047	BH-NJ
1340 WNNH NH MADBURY	R.F.D. 3, ROUTE 16N, DOVER, NH 03820	SM-MA
1400 WBTB NC BEAUFORT	ROUTE 4, BOX 334, NEWPORT, NC 28570	RV-VA
1460 WBSN WI RACINE	2400 SOUTH 102nd STREET, SUITE 230 ROOT RIVER, WI 53227-2132	GHD-WV
1470 WCFJ IL CHICAGO HTS.	Address is FORD HEIGHTS 60411	GHD-WV
1500 WKGA IL ZION	210 SOUTH GENESEE STREET, WAUKESGA, IL 60085	GHD-WV
1560 WQXR NY NEW YORK	122 5th AVENUE 10011	BH-NJ
1570 WBUX PA DOYLESTOWN	P.O. BOX 2187 18901	RV-VA
1600 WBDI WV WHEELING	98 SIXTEENTH STREET	GHD-WV

## \*\*\*\* CONTRIBUTORS \*\*\*\*

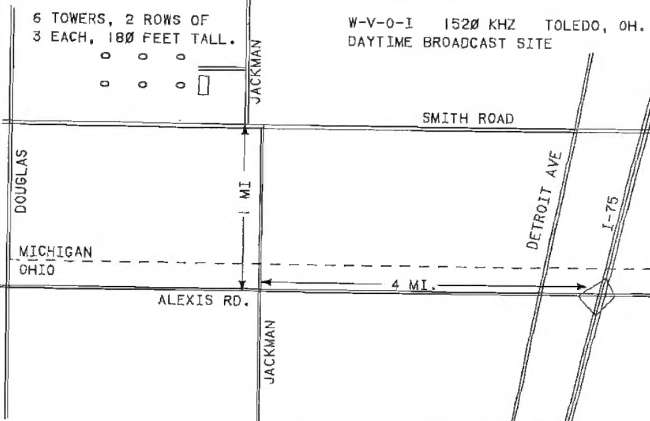
GHD-WV .. G. HARLEY DELEURERE, HENDRICKS, WV BH-NJ .. BOB HARRISON, UNION, NJ  
SM-MA .. STAN MORRIS, BOXFORD, MA DA-SW .. OLLE ALM, HARNOSAND, SWEDEN  
RV-VA .. ROBERT J. VANCE, FT. BELVOIR, VA

**NRC AM Radio Log**  
The most up-to-date listing of domestic MW stations available, anywhere! 200 pages, three-hole punched. \$12.95 each, to U.S. NRC members; \$13.95 Canadian NRC Members; others write. Send orders to Pub Center

## TOWER TIP

OH-13

WVOI-1520  
1000 WATTS  
TOLEDO, OH



WHAT TO LOOK FOR: The daytime site towers of WVOI are easily visible from Jackman or Smith Roads as shown. (The Night-time site is also a 6-tower array south of Toledo near I-80/90.)

CONTRIBUTED BY: Fred Vobbe, Lima, OH

Send a rough sketch and a few words about a.m. towers in your area to John D. Bowker, 14 Canoe Brook Drive, Princeton Jct., NJ 08550.

## FM Station Address Book

ONLY \$8.95 (Canada, US\$9.45) to the Pub Center (Foreign orders, please write for price)  
• Listed by state, city • 6.5x11 inches, 3-hole punched • Full-size type

# Domestic DX Digest - East

DX Catches in the Eastern U. S. and Canada, with 24-hr. ELT

**William Hale**  
734 Burleson  
San Marcos, TX 78666

## MEDIUM WAVE ramblings

■ From what has been reported to this column, I think WPDQ should win the **Station of the Year** award, hands down, for their efforts during Hurricane Hugo!! Anyone second the motion?

■ More "Hugo Happenings" have been reported. Besides what is listed, **Charles Reh** sez he heard unns WVOC-SC 560, WPTF-NC 680, WRRZ-NC 880, WMAZ-GA 940, WJMX-SC 970, WBT-NC 1110, WHTM-NC 1270, WBHC-SC 1270, WBLA-NC 1440 & WBSC-SC 1550 with Hugo reports. Also, he heard a report that WTMA-1250 had been ordered off due to electrical hazard & noted no sign of WZKG-1390 after landfall, though they were very strong earlier in the evening.

## SPECIAL



- 700 KSEV TX TOMBALL - per blurb in Houston Chronicle, will be carrying Los Angeles Kings HKY! (ED-TX)
- 750 KJEL MO LEBANON - 9/13 1420 with MOR mx, change from C&W; is simulcasting with KIEK 103.7 (WPF-MO)
- 790 WRMS IL BEARDSTOWN - 9/13 1656 with MOR mx, change from C&W (WPF-MO)
- 920 WRFC GA ATLANTA - will be changing CLs to WMBN (for Moody Bible Network) soon, if not by the time you read this; the format is being fed via satellite from Chicago; they will move into the old WEKS 1080/104.1 studios on Peachtree St in Atlanta; the CE is Bob Lipscomb, address is 1447 Peachtree St NE Suite 600, Atlanta, GA 30309; per Pam Lipscomb, daughter of CE (EB-GA)
- 1000 WLUP IL CHICAGO - 10/2 0128 did not sign off tonight, because their FM did (CR-IN)
- KBIB TX MARION - new stn is on, but with only U1 50 watts on Special Temporary Authorization; with SS REL (AB-TX)
- 1050 WPBE GA CONYERS - 9/19 1245 good with AC, PB-1050 WPBE Conyers ID→Georgia Net sports; ex:WTPD & ContChr (EB-GA)
- 1110 WKEG PA WASHINGTON - 9/22 previously silent, now back on (JM-PA)
- 1220 KLPW MO UNION - 9/12 to 9/15 has not been simulcasting FM 101.7 all week; AM format is MOR (WPF-MO)
- 1230 WHCO IL SPARTA - 9/12 1706-1714 with MOR mx; add to your Log (WPF-MO)
- 1300 WYTL IN TERRE HAUTE - 9/11 1131-1614+ with T40/MOR mx simulcasting with WPF-FM 102.7; change from C&W (WPF-IN2)
- 1330 WSSY IL EVANSTON - 9/24 0900 with sign-on announcing day power of 5Kw, PSSA of 51 watts & PSRA of 500 watts; has been promoting the fact that starting 10/1 the heavy metal mx on G-Force will go to 0500 instead of 0100 sign-off, which doesn't help me, I lose them at LSS (WPF-IN)
- 1340 KSEK KS PITTSBURG - 9/1 visited during pre-Topeka, Kansas travels; mentd on since July '88, now with SMN Stardust (JM-KS)
- KXEO MO MEXICO - 9/12 1721-1756 with MOR, change from BBD (WPF-MO)
- 1350 KSLQ MO WASHINGTON - 9/13 1629-1636 with E2L/MOR mx, change from T40 (WPF-MO)
- 1360 WTSB GA ROME - 9/7 1548 fair mono & 8 signals with C&W mx; now C-Quam & simulcasting with WTSB-FM 107.1 Rockmart, GA; ex:WRJY & Format 41 (EB-GA)
- 1390 WAJD FL GAINESVILLE - 9/3 0215 good, but fadey over WZKG with live-assist herd ROK, change from C&W, 1390 Gator Rock non-ID, legal ID @ 0257 (EB-GA)
- 1400 KJCF MO FESTUS - 9/13 1637-1642 with Oldies 1400, change from C&W (WPF-MO)
- 1410 WTIM IL TAYLORVILLE - 9/15 1221 with C&W mx, change from MOR (WPF-IN)
- 1450 WPSE PA ERIE - 9/23 replaces WEYZ, long since switched to 1330, ments: Serving the Erie community from Penn State to Behrand, this is AM 1450 WPSE. Erie+CBS Nix; ABC affiliate also; also News-Talk & Sports Radio (JM-PA1)
- 1460 KSO IA DES MOINES - 9/5 0343-0419+ simulcast of 94.9 KGGO with 2 for Tuesday; mx by Loverboy, Whitesnake & the 3 O'Clock CD by Lynyrd Skynyrd; ID @ 0400 wasn't even legal for FM; Des Moines best rock 95-KGGO; no mention of AM so don't know if still 3 letter call (WPF-IN)
- WMBA PA AMBRIDGE - now 24 hrs, as of 10/89 with CNN Headlines (not Nix, as local KQV has sole rights to that), & American Radio Net shows from 1900-0600 from satellite; no one is at the stn during these hours! per WMBA talk host Mike Romigh (JM-PA)
- 1480 WABB AL MOBILE - 10/2 0136 good over WCIN with CHR, WABB-FM 97 non-IDs, Rolling Stones concert tix giveaway promo (for Birmingham show), change from SMN Heart & Soul; simulcasts WABB-FM 97.5 (EB-GA)

- 1510 KCCV MO INDEPENDENCE - 8/30 per stn president Richard Bott, will move to 760 with 6Kw directional NE+SW within 60-90 days (of 8/30) & will test beforehand; asks NRCers to listen & write (JM-MO)
- 1550 KAPE MO KAPE GIRARDEAU - 9/15 1411 noted with The best mx of all time (Oldies) (yuk!), change from MOR; in # (WPF-MO)

## UNIDs AND UNIDs IDd

- 690 KAOQ NE TERRYTOWN - is probably Charles Reh's unID of 8/1 (Issue 30) as they have been 24 hours for at least 2 years now, but don't know their nite power (TH-CA)
- 1230 UNID - 9/5 0315 poor+fair with lite rock, possible oldies; The most music ? by law on K(T?)FM or N, Magic five (SA-MB)
- 1420 UNID - 9/8 0635 poor with oldies mx 11480 unID stn (SA-MB)
- 1440 UNID - 9/19 0445 fair with 1440, FM 104.9 IDs several times between oldies (SA-MB)

## DX/EQUIPMENT TESTS

- 810 WSJC MS MAGEE - 10/1 0154 blowing away WGY with C&W mx, WSJC Magee Mississippi on the air for testing by southern-accented annncr; carrier off @ 0155 (EB-GA)
- 1080 WFTD GA MARIETTA - 9/30 0105 loud over WDJX/KRLD with TT & This is WFTD Marietta testing; carrier off by 0110 (EB-GA)

## HURRICANE HUGO EMERGENCY BROADCASTS-PART II

- 680 WPTF NC RALEIGH - 9/21 2212 barely dominating crowded channel with C&W mx+localwx; DJ them announced that stn would be shifting its schedule to keep on top of Hurricane Hugo; discussion followed with local Ham radio operator about the Emergency Radio Network in place to deal with the storm (JL-OH)
- 690 WPDQ FL JACKSONVILLE - 9/21 2020 XLNT with sports talk on the Greg Larson Show; @ 2030 switched to Hugo reports for the rest of the night; was running U1 50Kw; just what CLs were used between WAPE & WPDQ? Was listed as WJKF in AMS, WJKF in Formats & WJKL in FCC release (CR-ON)
- WPDQ FL JACKSONVILLE - 9/21 1930 on with U1 50Kw since Charleston broadcasters asked them to stay on as they were down; with 2 DJs (Allan Sams & Jerry Smith) taking calls from the Eastern Seaboard; played a few oldies & said the new owners purchased The mighty 690-WAPE a couple of months ago; XLNT signal with a few fades; what a service WPDQ provided! (JM-PA)
- WPDQ FL JACKSONVILLE - 9/21 2338 noted very strong with Hugo info for the Carolinas; said was aiming full power up the coast (HJH-PA)
- WPDQ FL JACKSONVILLE - 9/21 2234 very good over Cuba/CBF/WVOK with Hurricane Hugo info, ment of WAPE-FM 95.1 (now their sister stn), OLD, The mighty 690 non-ID (memories of XETRA-690 relived); ex:WAPE, CHR (EB-GA)
- WPDQ FL JACKSONVILLE - 9/21 2250 with Hugo info, taking collect calls from all over; gave phone # as (904) 264-4523; mentd several times they were on full power for Hugo info; Mighty 690 ment; made it very clear they were formally WAPE; played a few OLDIES with 69 WPDQ Jacksonville jx; good+XLNT with a little WLW splash @ times; they did a great job; I listened for hours because we've got family in SC; got them on tape for 2 hrs (BES-VA)
- WPDQ FL JACKSONVILLE - 9/23 0024-0100 booming in with Hugo info & taking phone calls; said power was 50,000 watts; stayed in good for 30 minutes with Cuba in background, but after 0100 CBF took over; 1st-timer (WW-RI)
- WPDQ FL JACKSONVILLE - 9/24 0102 over CBF with The mighty 690 WPDQ; 8 dots! on 5-meter; mention of WAPE 95.1 Staff; PDQ with disaster relief for Charleston SC; was like this for 5 days, stn went without commercial revenue; ex:WJKL/WAPE (WPF-IN)
- WPDQ FL JACKSONVILLE - 9/24 0123 with Mighty 690; call-in pgm, all on Hugo problems in SC; one caller wanted to know where her elevator mx was; under/over CBF (HF-MI)
- WPDQ FL JACKSONVILLE - 9/25 2353-0002 XLNT with talk show; host mentd 50Kw night power for aid to Hugo relief efforts in Carolinas; caller asked if they could stay on 50Kw all the time and response was no because of protection for Canada, New Orleans, Cuba; also mentd new studio being built; apparently the 3rd CL change? (JL-OH)
- 740 WMBL NC MOREHEAD CITY - 9/21 2243 good then fading 5 minutes later to CBL with Charley Rogers & Your Stormwatch & Information stn on 96.3 WRHT, with oldies (JM-PA)



**KVAS**

880 WRRZ NC CLINTON - 9/21 2310 strong @ times with C&W mx & school delays 'cause of Hugo; slogan: Double R Country (HJH-PA)  
 930 WRRF NC WASHINGTON - 9/21 2251 XLNT with Here at the weather center→Tom Snyder; CBS Nx; mentd broadcasting info & entertainment 24 hrs a day & Full Service Radio; past midnight with day pattern (JM-PA)  
 940 WMAZ GA MACON - 9/22 0022 good with Hugo info+CNN Nx (JM-PA)  
 980 WAAV NC LELAND - 9/21 2240 with Hugo reports from meteorologist Wayne Barnes; many 980-Wave non-IDs; said they were simul with WENI(FM) (CR-ON)  
 990 WEEB NC SOUTHERN PINES - 9/21 2315 fair→poor under WIVK with WEEB Weatherline promo (EB-GA)  
 1280 WJAY SC MULLINS - 9/21 2228 wx reports from SC cities, C&W mx; on air due to Hugo; fair→good (WPT-DC)  
 WJAY SC MULLINS - 9/21 2320 with continuous feed from from National Weather Service 'til 2330 went they went→local Hugo reports including closings in Mullins & Marion; played C&W mx between reports (CR-ON)  
 1380 WSFL NC NEW BERN - 9/21 1958 with warning to leave coastal because of Hugo; fair; ex:WBIC (WPT-DC)  
 1590 WCAW SC CAMDEN - 9/21 2205 ending ABC Nx→Hugo reports; gave phone # of stn (438-9002) several times for cancellations & for those unable to get thru to relief centers; mentioned normal sked is 0600-2305 but that they'd be on all night (CR-ON)

## STEREO LITES LIT

960 WRFC GA ATHENS - per verie, stn is now C-Quam # (EB-GA)

## MIDNIGHT TO MIDDAY

690 CBF PQ MONTREAL - 9/29 0447-0451 good with CLA mx→FF talk (JL-OH)  
 730 WOHs NC SHELBY - 9/30 Midnight Giving you the news of the hour, \$ 73 WOHs→MBS (I think) Nx; very poor, mixing with WPAL (BES-VA)  
 WPAL SC CHARLESTON - 9/30 0003 with We're on the inside of 12 Midnight, good morning I'm Jay Butler; he mentd he was getting a lot of calls & people were using their battery powered radios; This is WPAL Charleston, where the hits, HIT; non-ID jx→soul mx; UC format; 0007 PSA for advertising on radio; poor, mixing with WOHs; not bad for 100 watts, though; both lost by 0030 due to SS QRM (BES-VA)  
 850 CKVL PQ VERDUN - 9/29 0510-0525 good & dominating @ nite the last few weeks over WRMR; FF POP mx & long stretches of talk between M-M & M-F announcers; in # (JL-OH)  
 870 KDKK MN PARK RAPIDS - 9/5 0700 fair with KPRM-FM & KDKK Park Rapids ID mixing with WML; new; MN #98 (SA-MB) (Vol 56 Issue 29 ANSwitch sez the call change was for their FMR; what's going on here?-Ed.)  
 880 KGHT AR SHERIDAN - 9/16 0132 on 220 watt nite power & C&W mx with IRN; over/under WCBs (WPF-MO)  
 920 KYST TX TEXAS CITY - 10/1 0100 good with fair \$ in WAFS null with KYST AM 920 non-IDs in EE & SS, Mexicano mx, bilingual DJ; tent WOKY also, in with CBS Nx & NOS (EB-GA)  
 980 WONE OH DAYTON - 9/29 0549 good in #, with C&W →ment:980, The best country, WONE (JL-OH)  
 1050 CHUM ON TORONTO - 9/4 0059 with All oldies, all the time & All oldies, 1050 Chum (HF-MI)  
 1080 KRLD TX DALLAS - 9/29 0629 fair→good with ment of CBS Net, Texas State Net, & the resources of the KRLD news department, we're NewsRadio 1080, KRLD, Ft Worth-Dallas (JL-OH)  
 1090 CKWW ON KITCHENER - 9/4 0055 ad for Mohawk Raceway, non-ID:Hits Radio, AM 109 (HF-MI)  
 1180 WMLX KY FLORENCE - 9/16 0652 fair with All those memories, all those great songs & only one Cincinnati stn playing them all, AM 1180 WMLX→60s mx (SA-MB)  
 1200 WOAI TX SAN ANTONIO - 9/29 0616 weak but alone with motor racing sports→ment of the Texas Open on WOAI, the sports voice of the great Southwest (JL-OH)  
 1210 WDAO OH DAYTON - 9/11 0645 fair with female saying WDAO, Dayton signing on; no SSB, no info; possible new sign-on time (SA-MB)  
 1250 KALO TX PORT ARTHUR - 9/12 0055 good→local-like over WTMA with UC, sign-off mentg The Heart & Soul of Southeast Texas; gave address as in Log; Kalo non-ID (EB-GA)  
 1260 WNDE IN INDIANAPOLIS - 9/29 0655-0700 with ads for USA Today & NewsCenter 13, WTHR-TV→sports news on BB playoffs→wx; simul with AC Q-95, WFBQ 94.7; fair (JL-OH)  
 CIHI NB FREDERICTON - 8/27 0025 strong with non-ID:C-High (Is that what CIHI spells?) (WW-RI)  
 1290 CJBK ON LONDON - 9/11 0203 came in strong, no sign of local WRCP; with new & old rock mx & no announcer hrd, just chorus singing CJBK; 1st-timer (WW-RI)



Osborn Communications Corporation  
 Armour Building  
 3435 Broadway, Kansas City, Missouri 64111  
 (816) 753-7707

1320 KUTR UT SALT LAKE CITY - 9/16 0744 good with 1320 AM KUTR non-IDs; EZL-type mx; new; UT #18; ex:KEMX, KBUG (SA-MB)  
 CKEC NS NEW GL→AS60W - 9/11 0230 good with ROK song & wx for New Glasgow (CW-RI)  
 1340 WIZE OH SPRINGFIELD - 9/8 0308 with 2 mentions of CLs & C&W mx, I believe, then back to mush; tentative on this would-be 1st-timer (WPF-IN)  
 1420 WDC IA DAVENPORT - 9/16 0100 good over WHK/WVJS with legal ID→NBC Nx (EB-GA)  
 1460 KSO IA DES MOINES - 9/10 0527 fair with If you feel 2 rock & roll, you know it's Des Moines 95, KGGG & several 95 KGGG non-IDs; mix of 70s & 80s rock mx; no ID @ 0600, only 95 KGGG (SA-MB)  
 1480 CKAN ON NEWMARKET - 9/4 0040 with Your Favorite hits all the time--1480 CKAN; Richmond Hill ads (HF-MI)  
 1520 WSVL IN SHELBYVILLE - 9/24 0005 with sign-off announcements; over/under WWKB (HF-MI)  
 1570 WBUX PA DOYLESTOWN - 9/21 0044 strong over CKLM with non-IDs; 1570 WBUX & Music of the stars-Bucks County station; CNN Nx @ 0100 (WW-RI)  
 1590 WAKR OH AKRON - 9/29 0555-0559 with cancer discussion→ad for Whitmer Lighting; in #, fair→good with flutter (JL-OH)  
 1600 WSNX MI MUSKEGON - 9/18 0640 fair with The New, Sunny FM non-IDs, wx for Muskegon→rock mx (SA-MB)

# KBBA

## MIDDAY TO MIDNIGHT

BENTON BROADCASTING COMPANY

640 WFNC NC FAYETTEVILLE - 9/21 2300 with Talknet, ID; fair→good; ex:940 (WPT-DC)  
 680 WDBC MI ESCANABA - 9/16 1950 with oldies, CBS Nx promo (HF-MI)  
 720 CHTN PI CHARLOTTETOWN - 9/14 2331 with POP mx pgm; ad for Guardian-Patriot newspaper; over/equal with WGN (HF-MI)  
 740 WVLN IL OLNEY - 9/11 1300 with CNN Nx (WPF-IN2)  
 770 WEW MO ST LOUIS - 8/31 2053 good over WVN with BBD, ment of Lee Coffee & Buddy Mareno, sign-off with Kate Smith's God Bless America; St Louis #8 (EB-GA)  
 890 WKFJ PA CASHTOWN - 9/28 1910-1915 good with The Washington Report, mx & full-data sign-off→ment of Studios 7 miles west on US Hwy 30 with 890 watts non-directional, 0/0 by Jesus Ministries, Intl, Inc; 1st time tried for here (JM-PA)  
 920 WJRD AL RUSSELLVILLE - 10/2 1855 fair→poor in WAFS null with C&W mx, WJRD Russellville legal ID→Alabama Network Nx (EB-GA)  
 930 WBEN NY BUFFALO - 9/18 Sabres hockey network on WBEN, mixing with QRM (HF-MI)  
 960 WRFC GA ATHENS - 9/6 1518 with CHR, CLs, sports pgm promo; good→fair over WERC with WNIV-970 splash (EB-GA)  
 1130 WBZL IN BRAZIL - 9/11 1608 noted with C&W mx simulcast of 97.7 WSDM (WPF-IN2)  
 1200 WBZY PA NEWCASTLE - 9/18 2115 You're listening to 30 years of hits with Dave ? on WBZY; AM-1200 WBZY; over/under WOAI (HF-MI)  
 1250 WRAY IN PRINCETON - 9/11 1611 with MOR mx simulcast of WRAY FM 98.1 (WPF-IN2)  
 1300 KMMO MO MARSHALL - 9/15 1726 noted simulcasting with the Country Connection, KMMO-FM 102.9 (WPF-MO)  
 1310 WBFD PA BEDFORD - 9/27 1930 with sign-off annct (HJH-PA)  
 1330 WRIE PA ERIE - 9/28 1955-2017 with America's #1 MoYL Stn, AM 1330, WEYZ, Erie (WJAS & KSLA would dispute that-hi)→ABC Nx, wx, mx; report hand-delivered to Opd Bob Mallery; XLNT with fades (JM-PA)  
 WADJ PA SOMERSET - 9/27 1927 very strong with ROK mx, ID (HJH-PA)  
 1400 WKPT TN KINGSPOORT - 9/29 2200 partial ID in mud, and gone to ↓ (JM-PA)  
 WBTH WV WILLIAMSON - 9/29 2206 fair with young woman's voice mentg wx in Williamson→heavy metal mx (JM-PA)  
 1410 WING OH DAYTON - 9/28 2215 fair→good, over/under mess with OLD & menti:Your oldies stn in Dayton, WING; a rare catch @ night (JL-OH)  
 1490 WZKT VA WAYNESBORO - 9/27 1959 fair over mess with female & partial ID→CNN Nx; 1st time hrd with these CLs; frequently heard as (ex) WAYZ (JM-PA)  
 1510 WINU IL HIGHLAND - 9/15 1200-1209 with end of ABC Direction Nx→BBD/EZL mx; not on 880 yet (WPF-MO)  
 1520 WDSL NC MOCKSVILLE - 9/25 with sign-off annct with program preview for next day, then off (RJV-VA)  
 WARR NC WARRENTON - 9/25 with UC mx to sign-off with SSB @ 1915 (RJV-VA)  
 1530 WRTF NC CHAPEL HILL - 9/26 with inspirational mx, wx by Roger King, bible reading, then off after annct @ 1929 (RJV-VA)  
 1540 WYNC NC YANCEYVILLE - 9/26 1930 fair with partial sign-off over CHIN (JM-PA)  
 WYNC NC YANCEYVILLE - 9/27 with Radio Bible Class @ 1915, sign-off annct by Andy Johnson; good signal, but fading; QRM de WKIE-VA (RJV-VA)  
 1550 WKBA VA VINTON - 9/29 with REL pgm @ 1915, sign-off after annct @ 1930; mixing with WARD-PA/WBSC-SC (RJV-VA)  
 CHIN ON TORONTO - 9/10 0112 with Fine back-to-school sounds right here on 1540 CHIN; 23' outside our studios ment; Got some great dance sounds coming up right here on rhythm radio; The action is on CHIN jx; very good @



times with occasional WCKY splash, way over the usual mixing of WPTR/KXEL; QRM somewhat worse by 0315 but still good; pretty much a regular now (BES-VA)

- 1600 WBTO IL LINTON - 9/11 1206-1604+ noted simulcasting EZL/BBD-type mx with WQTV-FM 93.5 (WPF-IN2)
- KLEB LA GOLDEN MEADOW - 9/17 2041 female with C&W mx; mentioned sign-off @ 9 PM CDT; up briefly and gone; 1st time here (HF-MI)
- CHNR ON SIMCOE - 9/14 2359 with CHNR Newsbreak with marine wx; Satellite forecast for Simcoe-Vanessa+POP mx (HF-MI)
- 1590 WARV RI WARWICK - 9/30 2002 strong with REL & giving phone numbers for listeners to call, then faded back into muck (HJH-PA)

### REPORTERS:

- SA-MB SHAWN AXELROD//Winnipeg, MB//R-70 + Loop, 140' LW + Mini Tun-3
- HF-MI HAROLD FRODGE//Midland, MI//ICOM R71A + 185' LW
- CR-ON CHARLES REH//Leamington, ON//R-390A, S-40A + Sanserino Loop, 40" phased loop, RS TR-3000 taper
- WPT-DC WILLIAM TOWNSHEND//Washington, DC//ICF-2010
- RJV-VA ROBERT VANCE//Ft Belvoir, VA//
- WPF-IN WENDELL FORD//Westville, IN//ICF-2010
- WPF-IN2 WENDELL FORD//Linton, IN//ICF-2010
- WPF-IL WENDELL FORD//OTR in Greenville, IL//ICF-2010
- WPF-MO WENDELL FORD//St Charles, MO//ICF-2010
- JL-OH JEFFREY LESS//Toledo, OH//Mopar 4311-956 or TM-152 w/LW
- EB-GA ERIC BUENEMAN//Woodstock, GA//DX-200, TM-152, SM-2
- JM-PA JOHN MALICKY//Pittsburgh, PA//Superadio
- JM-PA1 JOHN MALICKY//Erie, PA//Audiovox Rx
- JM-KS JOHN MALICKY//Pittsburg, KA//'89 Mopar Rx
- JM-MO JOHN MALICKY//Kansas City, MO//'89 Mopar Rx
- HJH-PA HARRY HAYES//Wilkes-Barre, PA//Superadio + Superloop
- BES-VA BARRY SHINALL//Cedar Bluff, VA//Pioneer SX-V300 + factory loop
- TH-CA TIM HALL//Chula Vista, CA//
- AB-TX ARTIE BIGLEY//San Antonio//Superadio



### SOME ABBREVIATIONS & SPECIAL SYMBOLS USED IN DDXD-E

TT: test tones OC: open carrier TC: time check RS: regular schedule QRM: interference  
 QTH: location SID: singing ID CID: code ID jx: jingle mx: music nx: news wx: weather  
 SSB: Star Spangled Banner LSR: local sunrise SRS: sunrise skip LSS: local sunset SSS:  
 sunset skip PSRA: Pre-Sunrise Authority HS: high school FB: football BB: baseball  
 HKY: hockey BKB: basketball :00: on the hour H: parallel with :to or into S: stereo  
 SS: Spanish FF: French EE: English POL: political GOS: gospel REL: religion or religious  
 AC: adult contemporary BBD: big band OLD: oldies ROK: rock 'n' roll CHR: contemporary  
 hit radio ContChr: contemporary Christian C&W: country & western EZL: easy listening  
 UC: urban contemporary AP: Associated Press Radio UPI: United Press International  
 MBS: Mutual Broadcasting System USRN: United States Radio Net NPR: National Public  
 Radio MCRN: Music Country Radio Net IRN: Interstate Radio Net

73, Bell

### Chicago ARBITRON Numbers — Summer 1989 - via Mark Strickert

	Su89	Sp89	W88	F88					
1 WGN-720	9.3	9.1	9.5	8.6	22 WIND-560	1.4	1.0	.5	.8
2 WCCI-107.5	6.7	6.2	7.4	6.7	WLS-890	1.4	1.6	1.6	1.6
3 WBBM-780	5.5	5.3	4.8	6.0	24 WFMT-98.7	1.3	1.4	1.2	1.3
4 WVAZ-102.7	4.9	4.7	6.0	4.3	WNIB-97.1	1.3	1.2	1.3	1.4
5 WKQX-101.1	4.4	4.0	3.1	4.1	26 WVOH-1450	1.0	.9	.9	1.4
6 WLUP-97.9	4.4	4.8	4.8	4.3	27 WCCI-1390	.6	.6	.4	.3
7 WCKG-105.9	3.8	4.1	4.0	4.3	WLSR-106.3	.6	.3	.7	.8
8 WUSN-99.5	3.7	2.7	3.4	3.0	WKEZ-820	.6	.9	.5	.5
9 WYZZ-94.7	3.7	4.4	3.6	3.0	WYSY-107.9	.6	.4	.6	.8
10 WBBM-96.3	3.6	4.1	3.8	3.2	31 WYCA-92.3	.5	.3	.4	.4
11 WJMK-104.3	3.5	2.8	3.4	4.2	WYLL-106.7	.5	.3	—	—
12 WLUP-1000	3.5	2.5	3.1	2.8	33 WJOB-1230	.4	.4	.3	—
13 WKEZ-100.3	3.5	3.6	4.7	5.6	WJOL-1340	.4	.3	.3	—
14 WJJD-1160	2.6	3.0	2.7	2.3	WTAQ-1300	.4	.6	.4	.4
15 WTMX-101.9	2.6	2.6	2.7	3.0	36 WABT-103.9	.3	—	—	—
16 WKRT-93.1	2.3	2.7	2.7	2.4	WBUS-99.9	.3	.5	.3	—
17 WNUA-95.5	2.1	2.3	1.3	2.5	WJZQ-95.1	.3	.3	—	—
18 WLIT-93.9	2.0	3.0	3.6	3.2	WLLI-96.7	.3	—	—	—
19 WOJO-105.1	1.9	1.7	1.6	1.2	WXLG-102.3	.3	—	—	—
20 WMAQ-670	1.8	1.8	1.6	1.4	WVXX-103.1	.3	—	.3	—
21 WFYR-103.5	1.6	2.0	1.9	1.8	42 WJPC-950	.2	.2	.2	.3

## International DX Digest

**Chuck Hutton**

983 St. Charles Ave., #1

Atlanta, GA 30306

(404) 892-6211, before 2300 ELT

Foreign DX Catches. Times are UTC; for ELT, subtract 5 hours

- 680 CUBA CMHN Cienfuegos 9/23 0310 good w/Rebelde pgms behind local WRKO. (Wyllie)
- 690 CUBA Cardenas CMFB 9/1 0226 seemed to be R. Progreso and was // 660 KHz but thought I heard R. Rebelde when I checked later. (Wyllie)
- 700 JAMAICA Montego Bay 8/26 0430 and 9/23 0523. 8/26 was good signal with Radio One ID and classical mx but 9/23 signal came booming in with program called The Sound Of Sonic with bits of new 45's played and said to go to a record store and buy them. Many JBC Radio One ID's. Best I ever heard it. (Wyllie)
- 720 VENEZUELA Porlamar YVGL 9/1 0241 strong, end of sports event and into SS music. Some interference from CHTN, ID as Radio Vision. (Wyllie)
- 800 NETHERLANDS ANTILLES Bonaire PJB 9/2 0633 strong with Trans World Radio ID and "A Woman's View". (Wyllie)
- 810 COLOMBIA HUCY Bogota 9/22 midnight news and Caracol ID, booming in strong. (Wyllie)
- 810 COLOMBIA R. Sutatenza has been sold to Caracol. First time I've noticed the new ID. Noted // 5075 SW 0422 9/21. (Renfrew)
- 810 BAHAMAS ZNS3 Freeport 0507 9/23 fair to good behind Colombia. End of midnight nes report and weather for Bahamas sound. Some talk about Hurricane Hugo. ID as Radio Bahamas and into show called "Gospel Song Time". First time veer logged for me. First Bahamas. (Wyllie)
- 820 CUBA CMJT Moron 9/1 0343 strong signal with Radio Progreso, other SS in background. Might be other Cuba as caught part of ID as "... de la Habana". (Wyllie)
- 820 COLOMBIA Cali HJED 9/22 0439 news stories about Colombia and Caracol IDs. (Wyllie)
- 825 ST. KITTS 9/1 0334 Radio Paradise booming in with no trouble at all. Religious program. (Wyllie)
- 830 CUBA Colon CMDB 8/27 0149 SS talk by man; nx in EE heard earlier. (Townshend)
- 830 CUBA R. Taino blasting through the static on my car radio 0230 9/21 with "Cocktails con Noticias" program. (Renfrew)
- 830 VENEZUELA Caracas YVLT 0400 9/1 and 9/9 at 0311. 9/1 was strong between R. Taino breakdowns. Caught ID as Radio Sensacion. 9/9 good with fast SS music, ID and many doorbells just like Radio Rumbo used to do. (Wyllie)
- 900 CUBA CMKB Cacocum 9/23 0436 good signal with SS music and Radio Progreso ID.
- 900 MEXICO XEW heard with full ID and Mexican NA 0600 9/21. (Renfrew)
- 940 CUBA CMDI Colon 9/15 0118 SS nx by man w/metronome in background. Fair-good o/u CBM. (Townshend)
- 1060 CUBA CMLO Amancio Rodriguez 8/27 0250 good with sports event and ID during break as Radio Victoria. First time logged this. (Wyllie)
- 1060 CUBA Baracoa CMMQ 9/15 0202 SS talk by man, rhumba, fair u/KYW. (Townshend)
- 1060 &
- 1070 CUBA "CMKS, Radio Trincheria Antiimperialista" heard in the clear on 1060, weak on 1070. At 0341 9/21: "desde Guantanamo, esta es Radio Trincheria Antiimperialista, transmitiendo onda media con 22 Kilos (probably the total of all 4 outlets) de potencia, .... 1060 KHz... Guantanamo, Caimanera y El Salvador... 1070 KHz ... Baracoa y ... la frecuencia 1250 ... Imias y San Antonio del Sur ... y por la frecuencia 1160 kilohertz en ... Maisi. Es la señal antiimperialista ... territorio mas oriental de Cuba." This spoken over Guantanamo. At 0349 "Programa Rondelontura, Emisora CMKS, Radio Trincheria Antiimperialista, Apartado 96, Coda Postal Noventa-Cinco-Siete, Guantanamo. Esperamos sus cartas, escribas." I don't see the 1160 outlet on any list - Maisi is on the eastern tip of Cuba. (Renfrew)
- 1100 CUBA Jaruco CMCY 9/27 2344 tentative, nx by man w/metronome. Fair u/WWWE. (Townshend)
- 1170 COLOMBIA HJDT Medellin 0441 8/30 news in SS, ID as Radio "Nutibara in Colombia". First time logged this. (Wyllie)

10  
1170 COLOMBIA HJNW Cartagena 8/30 0449 good mixing with HJDT. Seemed to be all news. ID many times as Caracol Cartagena. At 0456 heard Colombia NA, ID and more news. First time logged this. (Wyllie)  
1620 UNID SS 8/25 0346 strong at times, abruptly cut off. (Wyllie)

Jim Renfrew - Rochester, NY  
Bill Townshend - Washington DC  
William Wyllie - Prudence Island, RI

HQ150, SM1  
TRF  
Fisher 418

Newark Star-Ledger  
-via Bob Harrison

## Somerset radio station fights for life

By STEPHEN REDSHAW

Somerset County's only community-oriented radio station, WBRW of Bridgewater, has drastically cut back its staff and might go off the air within the next week, according to the station manager.

Twenty of the AM station's 23 employees received termination notices with their paychecks on Friday, just days after a pending sale of the station fell through, according to general manager Glenn Allison. The station, owned by Somerset Valley Broadcasting Inc., was set to be sold to a concern headed by brothers Anthony and Robert Santye of Montgomery.

"We are trying to keep the station on the air until another buyer can be found," Allison said, "but there is a real possibility we could be off the air within a week."

William Anderson, president of Somerset Valley Broadcasting, confirmed that the Santye brothers were "out of the picture," but he said negotiations were under way with another group of investors.

"Right now, we're trying to cut our losses and work with as small a staff as possible," Anderson said. "It's a difficult time for all of us, but I'm confident the station will come through this."

Anthony Santye said the sale, which had been in the works since January, fell through due to slumping advertising revenues and "serious time constraints" imposed on himself and his brother by other projects.

"We simply didn't have the time to run a radio station," he said.

Another "major factor" in the group's decision, Santye said, concerned the assumption of a debt of several hundred thousand dollars incurred during the station's unsuccessful bid to

upgrade its Federal Communications Commission (FCC) license. The 500-watt station, which now operates from 7:15 a.m. to 6:15 p.m., had sought to operate 24 hours a day.

Despite the layoffs, Allison said many of the present staff, and even some former staff members, have volunteered their time and expertise to ensure the station stays on the air.

"I really believe in this station. It's not a matter of money so much as a matter of the heart," said disc jockey Al Gambino. "I don't want to see it fade to black."

There are a lot of former (WBRW) staffers in the field, and a lot of them have said they want to lend a hand," said Jean Ogden of Somerville, a theater and art reviewer who has been with the station since its inception in 1971. "For some reason, people really love the place."

During its 18-year existence, WBRW has become an important news source for Somerset County residents, especially when it comes to weather-related school and office closings and high school sports. Just this year, Allison said, the station began airing live broadcasts of Mid-State Conference high school football games.

Within the last year, he said, the station also has upgraded its news staff and established several interview programs focusing on Somerset County issues.

Somerville Mayor Michael Kerwin said the demise of WBRW would "leave a substantial gap in the news coverage we've come to rely on in Central Jersey." Somerset County Freeholder Director William Wahl agreed.

"I think it's important to have an in-county station," Wahl said. "Our meetings draw regular coverage from stations in New Brunswick and Plainfield, and they do a good job, but the time they can devote to Somerset is limited."

Allison said the station would continue to operate "as close to normal as possible" for the next week, but there were "no guarantees" after that point.

"If we have to bring in the cops and set up housekeeping in here, we will," Allison said. "I've been here for eight years and I've invested a lot into this station and this community."

"Luckily, I'm not the only one who feels that way," he said.

could ever hope to have," his father, Ron Evans, said. Evans accompanied his son to Latrobe along with Steve Seifer, WBBW sports director.

"I have a soft spot when it comes to young people, especially the less fortunate," Seifer observed. "I am very happy to be a part of making Steve's dream come true. To see that big smile on his face when he met Noll gives me a great deal of satisfaction." Seifer concluded, "Evans' father added, 'Although Steve doesn't show his emotions too often, you could see in his eyes that he was excited.'"

Continuing, his dad said, "I waited for the day he could meet Chuck Noll for a long time"

Before departing from the Steelers' camp, Steve Evans told Noll, "Thanks for the autograph coach. Let's win the Super Bowl!"

On Saturday, at 6 p.m., WBBW will air excerpts from the meeting of Evans and Noll.

### Facts About NRC's DX Audio Service

The DX Audio Service, now in its third year of operation, provides the ONLY monthly broadcast news cassette service to the DX community.

The DX Audio Service, available to anyone anywhere, is designed to inform the radio listener in a way that is pleasing and informative. Many of the announcers on the service are professional broadcasters giving their free time to give the listener the finest service available.

DXAS was started to provide broadcast information, both AM and FM to the blind DX listener. It has evolved into a service for all types of listeners with material useful to all types of listeners. Many of our subscribers listen to the tape to and from their place of work while driving down the road.

One-year subscription, subscriber keeps the cassette each month: \$25

One-year subscription, subscriber returns the cassette each month by the 18th of the month for reduplication: \$12  
Sample copy, back issues of DXAS: \$3  
Cassettes are mailed by First Class mail, on or about the 20th of the month.  
Information, subscriptions, renewals, sample copies: write to NRC DX Audio Service - P. O. Box 24 - Cambridge, WI 53523-0024. For back issues: NRC Publications Center.

Youngstown Vindicator  
-via Gayle Yeager

## WBBW helps man's dream come true

Bed-ridden Steve Evans, 23, visits with Steelers' coach Chuck Noll, players

For 23-year-old Steve Evans, Tuesday, Aug. 22, goes into the books as one of the highlights of his young life. Evans, who has been bed-ridden for seven years, had a dream come true on that date when he traveled to the Pittsburgh Steelers' camp and met coach Chuck Noll and several of his players.

A rabid fan of the Steelers, Evans has battled scoliosis and respiratory ailments since birth. After several attempts at corrective surgery, he has been bed-ridden. He is on a respirator 24 hours each day. When officials at radio station WBBW learned that Evans, who resides in their neighborhood at 425 Knox St., had a strong desire to meet his favorite coach, arrangements to get Steve to Latrobe, Pa. were put in motion.

With a big assist from Gold Cross Ambulance and the Steelers, WBBW was able to swing the deal to get Evans to the camp. "Steve has more courage and determination than I

## The Answer Man

R. J. Edmunds

753 Valley Road

Blue Bell, PA 19422-2052

"No Question Is A Dumb Question"

Answers to members' questions, from the basic to the technical

Greetings, DX'ers, and welcome to this season's initial edition of the Answerman. I'm ready and willing to field as many questions in this column as you can supply, but I am dependent on you to supply them. One of the big reasons for the column's vacation this summer was a lack of support. I can only invent so many questions to go along with those I get before the whole thing becomes pointless, so let's get those questions in.

QUESTION: Do you know of any firms which sell mail-order parts for an R-390A?

ANSWER: I looked through a few magazines, and see nothing which specifically states that they do. I'm sure that some of the larger houses do. Any help from the membership, here?

QUESTION: Do you have the current addresses and subscription rates (to Canada) for the following magazines: Broadcasting, Popular Communications and 73?

ANSWER: 73 will cost you \$27 annually; write to them at Box 50330, Boulder, CO 80321-0330. Broadcasting got so high that I gave it up several years ago, but their address is 1735 DeSales St. NW, Washington, D. C. Popular Communications, I don't have, but I'm sure that someone else out there does.

QUESTION: Due to a computer malfunction, part of my DX log was wiped out. My backup was also damaged, and to restore my log, I need copies of any Musings I may have had in Volume 30, issues 7, 14, 19, 30, 31, and 32. I will be willing to pay any expenses incurred.

ANSWER: I have gone through my archives, and I don't have anything that far back. Other do, though, so if you have these available, let me know, and I'll pass the information on.

QUESTION: Would you advise the use of muffin fans for cooling in a tube-type communications receiver to prolong tube life?

ANSWER: I think we've had this one before, but I remain totally unconvinced that there is any significant benefit to this. Even under heavy use, these tubes last a long while, and most receivers are well-ventilated. In addition, I would be concerned about the possibility of introducing unwanted electrical noise from the fan motors into the receiver.

COMMENT: A member offered the thought that the discussion of the NRD-525 might be added to bit. He states that he is not certain that the problem referred to in this space last Spring as "leakage around the filters" might not really be leakage through them instead. In either case, replacement of the filters might be a worthwhile solution. I'm still awaiting further information on the subject from both this member, and the one who was investigating the modification from Sherwood. Please keep us informed.

QUESTION: Are there any advantages to checking the weather forecasts prior to a DX session to seek targets?

ANSWER: In some cases, there are. The more severe the weather pattern is, the more likely its effect will be. Obviously, if there are thunderstorms present within about 500 miles, you will hear static in your receiver. How much you can tolerate is an

individual question. If you have directional antennas, you can use them to null out the static if it is far enough away, and is coming from one direction.

In the event of other weather phenomena, the weather forecasts of most interest are those which provide details for a variety of locales, and include a national weather map. The Weather Channel on many Cable TV systems does this. Many good local newscasts have a fairly detailed projection of the national weather map. Often, though, the best bet is the newspaper weather map. Large frontal systems can affect DX by either enhancing or suppressing propagation in a given direction. It is well known that TV, FM and VHF amateur DX propagates along the edges of weather fronts, but the occurrences of this at MW frequencies are less clear.

Snowstorms covering much of the nation are also a good bet, often featuring enhanced propagation in the evening within the area of snowfall, due either to enhanced reflectivity of the ground surface, or the front itself, or both.

\* \* \* \* \*

That should get us going into the new season. Again, send your questions, answers, and comments to me pronto, and you'll see the next column sooner!

73's



## Black announcer pioneered in many fields

Asbury Park Press  
-via Ed Janusz

By Donald V. Adderton  
Press Staff Writer

When Harold B. Jackson was a youngster growing up in Washington, D.C., he had early visions of calling Senators' baseball games on the radio. There were only two drawbacks. Blacks weren't in the major leagues yet, and they certainly were not behind the mike.

Although he couldn't occupy the coveted "catbird seat," Jackson went on to become a Pied Piper of broadcasting, blazing a trail for blacks much as Jackie Robinson did in baseball.

Now, 50 years later, Hal Jackson — as he is known to millions of listeners — is still entertaining audiences and blazing a trail as the host of a popular Sunday morning music program heard on WBLS in New York.

"It is still fun for me after all these years (in broadcasting)," Jackson said in his New York City office, where he is group chairman at Inner City Broadcasting.

Many of his fans have grown accustomed to his warm and friendly charm on the radio, sort of an old friend who is never seen.

When not doing his six-hour live show every Sunday morning, Jackson, 73, handles his senior executive chores at the black-owned broadcasting company, which owns WBLS and several other broadcast properties around the country.

In fact, Jackson is a man who wears a few hats, having created the successful Miss Talented Teens International beauty pageant 19 years ago. But he says radio is his first love.

"I wanted to broadcast the ball games in Washington," said Jackson, who once was sports editor at the Washington Afro-American newspaper. "Station management told me that no nigger would ever broadcast the games on the station."

Jackson was undaunted in his pursuit of a sports play-by-play job. Eventually WOOL hired him to do Howard University football and American Negro League baseball, where he witnessed the rapid development of a young Robinson.

Jackson and Joe Bostic were instrumental in getting the then-Brooklyn Dodgers interested in Robinson.

"Sports was my first love, but then I noticed that there were no black disc jockeys," remembered Jackson, who broadcast four shows a day, beginning with a morning program in Washington, then driving to Baltimore and Annapolis, Md.

So successful was Jackson's three-city radio circuit that he moved it to the Big Apple in the early 1950s, once again becoming the first black on the air at a general-market station in New York.

Jackson hosted the night-owl "Birdland Show" on WABC, which featured the likes of Charlie Parker, Red Bank native Count Basie, and Ella Fitzgerald. He then did two additional shows on WABC and WMCA.

"I was the only radio personality in New York who did three shows in one day," Jackson said.

Jackson later had successful stints at WWRL in New York and WNJR in Newark, before joining Inner City.

But many people who were coming of age in the '60s remember the classic broadcasts Jackson hosted live during the summer from Palisades Amusement Park in New Jersey. Countless fans were familiar with the Jackson summer party call: "Hi, this is Hal Jackson, come on over to Palisades Park."

Jackson was one of the mainstays there for 16 years until the famed amusement park overlooking the Hudson River closed in 1970.

"I would bring kids over there by the millions," Jackson said. "It gave me a lot of satisfaction to see the kids having fun."

Extending a helping hand is another trademark Jackson has acquired over the years.

"I just like to reach out and watch people develop their talent," Jackson said, "especially when someone felt that talent couldn't make it."

Jackson's own career evolved in the era of big personality radio, an image that has been replaced by wall-to-wall music augmented by time and temperature checks.

"There is just no personality in radio anymore and I disagree with that," Jackson said. "People like to deal with personality. I would not dare let anyone change me."

Jackson described his Sunday show as one that does not have a scripted format. At any given moment the listener might hear Count Basie and Dinah Washington, followed by Earth Wind & Fire and Stevie Wonder.

"Nobody believes I don't use notes, because it is all factual with me," Jackson said. "I have known these entertainers personally for many years."

## Micro-MWDX-4A Loop v. Wire Phaser

Mark Connelly - WA1ION - 15 MAR 1989

Phasing a loop against a longwire or a vertical to establish a cardioid pattern continues to be a popular concept in the DX press. Over the years, numerous schemes have evolved: Dallas Lankford, Paul Swain, Ron Schatz, and others have done articles on this specific issue. My previous phasing unit articles accentuated two-wire phasing, but loop-vs.-wire and loop-vs.-loop possibilities have been addressed.

The units used to establish the null between the loop (oriented for maximum pickup of the station to be nulled) and the sense antenna (most often a vertical or other nearly-omnidirectional aerial) take several forms. Units that merely resistively-sum the wire's contribution with that of the loop, with no tuning of the wire at all, are difficult to use; nulls are pretty much hit-or-miss. Of greater value are designs that use a tuned circuit to couple in the RF contribution from the wire. Dallas Lankford's LIL-1 ("DX News", 27 FEB 1989) operates on such a principle. A possible drawback in that design is that no Q-spoiling is being employed either on the loop's L-C tank or on the tank circuit used for the wire (sense) aerial. Not spoiling the Q results in a very narrow-band null: as both Dallas and I have noted, you can null the carrier deeply without nulling the sidebands anywhere near as much. This is even worse if the two tank Q's aren't fairly closely matched. Real QRM-killing, therefore, is limited with such a scheme. Null "touchiness" with arrival-angle / hop-mode variation on skywave signals is also made worse by employing high-Q tanks. My experimentation indicates that a resistor of between 10K and 50K should be put across each L-C tank (loop and wire-tuner). This will widen the bandwidth and improve the steadiness of the null. Better than a fixed resistor is a "Q-skewing" pot of 50K (linear, non-reactive) — normally set to mid-range (25K) — across each tank. When "closing in" on a null, tweaking one Q-skewing pot and/or the other can "finish off" the pest station. When the Q's / frequency-response curves of the two tanks are fairly close, null bandwidth improves. The pots help to match tank Q's as well as providing controlled Q-reduction. The trade-offs with Q-spoiling are (1) the amount of phase shift for a given amount of tank capacitor detuning is lessened and (2) system sensitivity is lower. The way around problem (1) is to put a switchable (0/180 degree) phase-reversal transformer in one of the two signal lines (e.g. the loop line) enroute to the summation point that feeds the receiver. This allows a capacitor-detuning phase shift of +/- 80 degrees to do the work that previously required a +/- 180 degree detuning-created shift. Problem (2), sensitivity reduction, is easily solved by amplification. Gain is cheap below 30 MHz. Amplifier noise is seldom as limiting a factor as the amplifier's strong-signal handling ability. Amplification may be broadband, using a circuit similar to that in my "BBA" unit (NRC/IRCA reprint) or like that in Gerry Thomas's "Phase One". In strong signal areas, tuned amplification is preferable. When using Q-spoiled tanks, received bandwidth is relatively wide; therefore, a broadband amplifier after the phasing unit could get "creamed" by off-frequency locals: mix spurs / "intermod" could result. Even in the "boondocks", a broadband amplifier may get bothered by strong shortwave broadcast and utility signals coupled in from the longwire: mix spurs of RTTY, FAX, and other unwanted garbage could show up. Tuned (especially high-Q / regenerative) amplification after the phasing unit's summation point is definitely the way to go when DX signal levels after pest-nulling are low. Ken Cornell has published a schematic for such a tuned amp. in "Monitoring Times" and NRC/IRCA have reprints of my "MWT-1" unit. "MWT-2", under development, combines the best features of MWT-1 and Ken Cornell's tuner-amp. Commercially-made active tuner-preamps by MFJ, Grove, Arcomm, et al could be used as well. If a really good receiver (e.g. R-71A, R390A, HQ180A) is used, amplification is seldom necessary. With a Sony ICF-2010, on the other hand, you'll need it.

Another criticism that I have of some of the other loop-vs.-

Need to renew? Expired? The  
mailing label will tell you.

wire designs (and other tuner and phaser designs, in general) is an apparent fixation with clumsy homemade coils. Commercially-available inductors from Mouser, Digi-Key, and others do the job fine. Capacitive-coupling of the longwire to the tank gets rid of the need to use link-coupling. Once that requirement goes away, there's little need for homebrew coils. When small moulded inductors (resembling resistors) are used, bandswitching becomes easier. Rules-of-thumb ("heuristics" for you AI types) employed are that (1) The ratio of maximum tuning capacitance to input coupling capacitance should be about 6 to 1: 56 or 62 pF to couple to a tank that has a 10 to 365 pF variable cap. is about right for "average" wire aerials and (2) The ratio between the inductor that goes from the tank "high-Z" point (tuning capacitor stator) to the "tap" point (for low-Z output) should be about 5 times greater in value than the inductor which goes from the "tap" point to ground: e. g. 220 uH (high-Z to tap) and 47 (or 39) uH (tap to ground). In a phasing system, the Q of the coils used is of little importance: the Q-spoiling pot (set to 25K until null-finalization) is the main determining factor in tank Q.

ON 27 JAN 1986, I published an article entitled "The Micro-MWDX-4 Phasing Unit: A Small, Cheap, and Simple Approach". The article appeared shortly thereafter in "DX News" & "DX Monitor". The unit was presented as both a wire-vs.-wire and a loop-vs.-wire phaser. Its nulling performance as a two-wire phaser was not as good as phasing units employing a separate tank circuit for each wire. As a loop-vs.-wire unit, however, it worked quite well. A problem noted was signal loss because of the 100-ohm resistors in each signal line and because of the relatively-low coupling capacitor (39 pF) chosen to couple the longwire to the tank. The fixed 27K Q-spoiling resistor was adjudged to be less worthwhile than a 50K Q-skew pot across the wire-aerial tuning tank. If the pot could be squeezed into the box somehow, it would be. With all of these ideas in mind, I set about to create the Micro-MWDX-4A, a replacement for its predecessor. Furthermore, this newer unit was designed to be a loop-vs.-wire phasing unit only. Good two-wire phasing requires two L-C tanks, or (perhaps) delay-line techniques à la Gerry Thomas. (The jury's still out on that design.)

#### Micro-MWDX-4A: Relevant design features

- \* A "1-2-Null" function switch (S2) is used. This is standard on my newer phasing units. This feature is important because it allows isolation of each line, enabling independent peaking and level-setting prior to nulling.
- \* As on the earlier unit, a three-position bandswitch (S1) allows the wire-tuning tank to cover 500 to 1800 kHz without a great deal of influence by the length of wire connected.
- \* The coupling capacitor (C2), 62 pF, is a good compromise value between maximum achievable signal level and maximum tuning bandwidth. A higher value might couple in a bit more signal but the tuning and phase-shifting range would decrease. A lower value would give more phase-shifting and band-coverage capability, but with poorer signal-coupling efficiency.
- \* Two 500-ohm level pots (R1, R2) are used. With each pot set for maximum signal, the 500 ohm resistance of each pot to ground causes minimal signal loss when the phaser's output is "playing" into 50 ohms. These pots are available commercially for less than \$2 each.
- \* The phase-reversal transformer (T1: Mini-Circuits part number T1-6) as previously mentioned, permits nulls with less capacitor-detuning required. Because this is now a loop-vs.-wire unit, S3 is now used with T1, rather than to swap the two inputs.
- \* The 50K Q-skewing pot (R3) has been found to be very useful in nulling out the last few dB of a "pest" station or electrical noise.
- \* A Mouser 45KN100 vernier knob is used on C1. It costs about

\$8, a good deal less than some of the other vernier drives people have been using lately.

#### Micro-MWDX-4A: Loop-vs.-Wire Phasing Procedure

Figure 1, which follows in this article, is the schematic of the Micro-MWDX-4A. Please refer to it during this discussion of phasing procedure.

The desired effect of loop-vs.-wire phasing is to receive stations in the opposite direction of the station to be nulled out: this is something a loop, on its own, generally cannot do. The loop should be physically positioned for maximum signal from the direction of the desired station, regardless of the direction of the station to be nulled. When the desired station is in the opposite direction of the "pest", the loop will also be positioned for maximum "pest" station pickup.

The loop to be used may be either passive or active as long as the signal fed by it to the phasing unit is of a low impedance suitable to feed to a receiver's input. This low impedance signal, in the passive loop case, would come from a coupling link relatively loosely-coupled to the loop's high-Z LC tank. For active loops, the loop amplifier's output is, of course, used. For best phasing results the loop should be "Q-spoiled" somewhat by clipping in a fixed resistor of about 15K, or (preferably) a non-inductive, linear-taper 50K pot normally set to center (25K). This resistance is to be connected in parallel with the loop's parallel inductance / tuning capacitance. Of course, the connection should be easily removable for use of the loop in high-Q, non-phasing applications.

In the following procedure, the use of a 50K pot shunting the loop's LC tank will be assumed. This pot will be referred to as "Loop-R". The loop's tuning capacitor will be referred to as "Loop-C".

#### 1.0 Phasing Steps

- 1.1 Connect longwire to J1. Connect loop output coaxial cable to J2. Connect earth ground, if available, to J3. Connect phaser's output (J4), via coaxial cable, to the input of the receiver to be used, or to an RF amplifier between phaser and receiver.
- 1.2 Set level pots R1 and R2 to fully counterclockwise (CCW) (maximum resistance arm to ground). Set longwire-Q pot R3 and Loop-R to mechanical center (approx. 25K each).
- 1.3 Set frequency-range switch S1 to the correct range for the frequency of operation (see Table 1). Set function switch S2 to 1 (wire). Null-mode switch S3 may be put in either position: it doesn't matter yet.
- 1.4 Tune Line 1 (signal from longwire) by peaking desired-frequency signal strength with C1. At this time, leave C1 at its peaked-signal position.
- 1.5 Set S2 to 2 (loop). Use Loop-C to peak the desired-frequency coming from the loop.
- 1.6 Switch S2 back and forth between 1 and 2. If "1" is stronger than "2", adjust R1 until the levels are equal. If "2" is stronger than "1", adjust R2 until the levels are equal. Once this has been done, set S2 to Null.
- 1.7 Switch S3 back and forth between Null-a and Null-b positions. Leave S3 on the position yielding the weaker level (more cancellation) of the dominant station (or electrical noise) to be nulled. Subdominant signals, if present, should become more apparent if the proper S3 null position has been chosen.
- 1.8 Try to enhance the null by adjusting the pot set in step 1.6. If the best null is with that pot fully CCW, leave it there. Try to enhance the null by adjusting the opposite



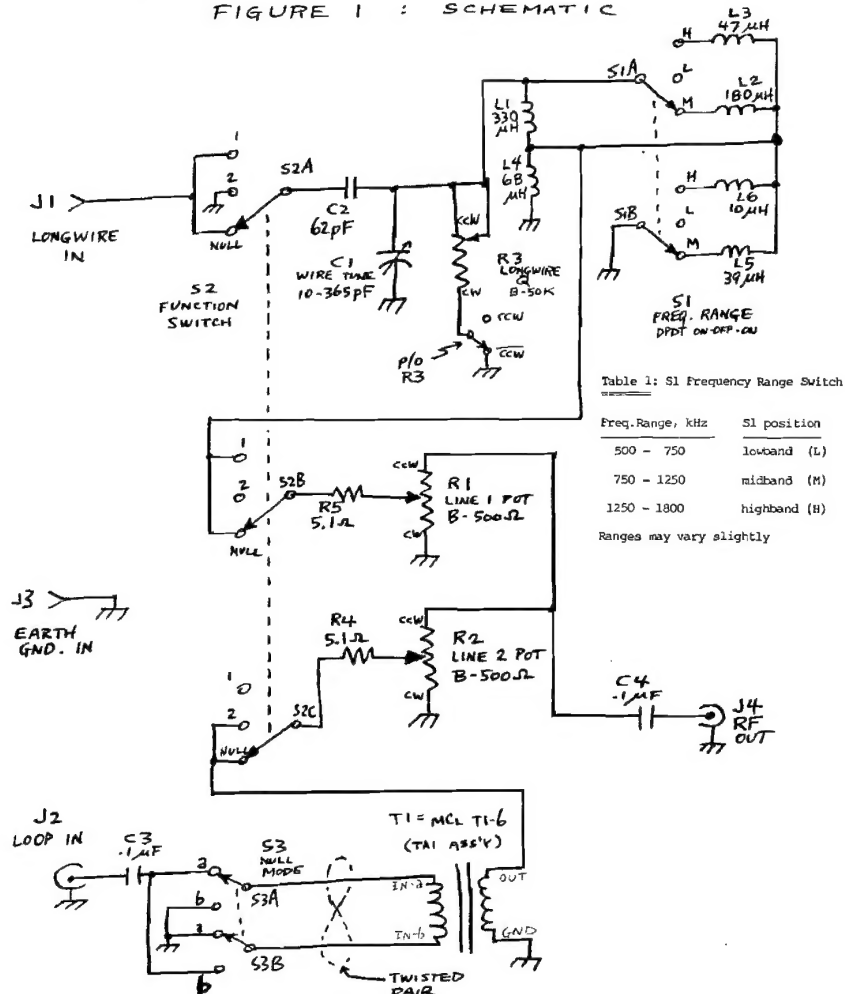
line's pot (R2 if you previously adjusted R1 or vice versa). If the best null is with that pot fully CCW, leave it there.

- 1.9 Adjust C1 to get a null of the dominant station. If a null doesn't occur, set S2 to 1, re-peak C1, then set S2 to Null and adjust Loop-C for a null.
- 1.10 Make successive adjustments of the capacitor which provided null improvement in step 1.9 and the pot that provided null improvement in step 1.8. After several of these successive adjustments, a fairly good null should be obtained. To finalize the null, try slight adjustments of R3 and Loop-R blended into the previous cycle of two-control tweaking. Slight physical re-positioning of the loop may also help.

This guide to loop-vs.-wire phasing is a starting point. Often it takes experience to get the correct "feel" for a given nulling situation: experience that will allow the minimum number of control manipulations and the quickest route to the desired null.

## MICRO-MWDX-4A LOOP-VS.-WIRE PHASER

FIGURE 1: SCHEMATIC



Construction details given here are the schematic (Figure 1), the parts list, the hole-drilling list, and pictorials to assist in mounting the vernier knob for C1 and a perfboard on which T1 is mounted. Given these pieces of information, most people with even modest homebrewing experience should have no trouble. Wire runs should be as short as practicable.

CONSTRUCTION-DATA APPENDIX TO MICRO-MWDX-4A ARTICLE  
(Includes parts list, notes, hole list, pictorials)

### Parts List for the Micro-MWDX-4A

An asterisk (\*) next to item number indicates that notes follow.

A plus-sign (+) next to QTY indicates that the minimum purchasable quantity is greater than the number of pieces required.

Vendor codes: RS = Radio Shack / Many locations worldwide  
MOU = Mouser Electronics / 11433 Woodside Ave.  
/ Santee, CA 92071  
MCL = Mini-Circuits Lab. / 2625 E. 14th St.  
/ Brooklyn, NY 11235

Item	Designator	Description/Value	Vendor	Vendor Stock #	QTY
1	*	chassis box	RS	270-238	1
2	(for R1,R2,R3,S2)	knob	RS	274-415	4
3	*	screw, 4-40X.375	MOU	572-01881	2 +
4	(for C1)	vernier knob	MOU	45KN100	1
5	*	screw, 4-40X.25"	MOU	572-01880	8 +
6	*	hex spacer, 4-40X.5"	MOU	534-1450A	4
7	*	split lockwasher, #4	MOU	572-00649	7 +
8	(for C1)	screw, 6-32X.25"	MOU	572-01888	2 +
9	(for C1)	split lockwasher, #6	MOU	572-00650	4 +
10	*	solder lug, #4	MOU	534-903	3 +
11	*	hex nut, 4-40	MOU	572-00484	2 +
12	*	(for TA1) perfboard	RS	276-1394	1
13	(for TA1)	"flea clip" terminal	MOU	574-T42-1/100	4 +
14	T1 (p/OA1)	RF transformer(1:1)	MCL	T1-6	1
15	C1	variable cap., 10-365pF	MOU	524-A1-227	1
16	C2	capacitor, 62 pF	MOU	21CB082	1
17	*	C3,C4 capacitor, 0.1 uF	RS	272-109	2
18	J1	red banana jack	RS	274-662	1
19	*	J2,J4 BNC jack	RS	278-105	2
20	J3	black banana jack	RS	274-662	1
21	L1	inductor, 330 uH	MOU	43LR334	1
22	L2	inductor, 180 uH	MOU	43LR184	1
23	L3	inductor, 47 uH	MOU	43LR475	1
24	L4	inductor, 68 uH	MOU	43LR685	1
25	L5	inductor, 39 uH	MOU	43LR395	1
26	L6	inductor, 10 uH	MOU	43LR105	1
27	*	R1,R2 pot., 500 ohm, linear	MOU	31CR205	2
28	R3	pot., 50K, linear	MOU	31CT405	1
29	*	R4,R5 resistor, 5.1 ohms	MOU	30BJ250-5.1	2
30	S1	switch, DPDT, center-off	RS	275-664	1
31	S2	switch/4pole/3pos. rotary	MOU	10YX043	1
32	S3	switch, DPDT, on-on toggle	RS	275-636	1
33	-	solder	RS	64-005	(as req'd)+
34	-	wire, bus	RS	278-1341	(as req'd)+
35	-	wire, #22 insulated	RS	278-1296	(as req'd)+
36	*	wire, twisted pair	[fabricate from Item 35]		

### Notes, by item number

- Box size is 5.2" X 2.92" X 2.125" (13.2 X 7.4 X 5.4 cm.).
- 2 pieces for vernier knob mounting
- 2 pieces for vernier knob mounting, 1 piece for G1 ground, 1 piece for G2 ground, 4 pieces for TA1 assembly
- 2 pieces for vernier knob mounting, 2 pieces for TA1 ass'y
- 4 pieces for vernier knob mounting, 3 pieces for TA1 ass'y
- 1 piece for G1, 1 piece for G2, 1 piece for TA1
- 1 piece for G1, 1 piece for G2
- Cut perfboard to 0.6" X 1.2" (see TA1 pictorial).
- 18, 27, 29: One piece for each designator listed
- 36: Twisted pair is used from S3 to T1, per schematic.

## Hole-drilling list for Micro-MWDX-4A

X = Horizontal distance, in inches, from the vertical centerline (VCL) on the side observed. Negative values of X are left of VCL, positive values of X are right of VCL.

Y = Vertical distance, in inches, from the bottom horizontal edge of the side observed.

D = Hole diameter in inches.

Hole loci are first marked on the box with a scribe and are then drilled with a .125" bit. Subsequently, as required, the holes are enlarged to the proper size by using progressively larger bits up to that corresponding to the final desired diameter.

\*\*\*\*\*

## LEFT SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	J1	Wire 1 In - banana jack	-0.75	0.5	0.3125
2	J3	Earth GND In - banana jack	0.0	0.5	0.3125
3	G1	GND H/W - internal lug	0.0	1.125	0.125
4	J2	Loop In - BNC jack	0.75	0.5	0.375

## TOP SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	S3	Null-mode switch - tab	-2.125	2.375	0.125
2	S3	Null-mode switch - shaft	-2.125	2.125	0.25
3	S1	Freq. Range switch - shaft	-2.125	0.75	0.25
4	S1	Freq. Range switch - tab	-2.125	0.5	0.125
5	C1	Tuning cap. - mounting H/W 1	-1.088	1.625	0.144
6	C1	Tuning cap. - shaft	-0.625	1.375	0.5
7	C1	Tuning cap. - mounting H/W 2	-0.162	1.625	0.144
8	-	C1's vernier knob - H/W 1	-1.265	0.75	0.125
9	-	C1's vernier knob - H/W 2	0.015	0.75	0.125
10	G2	GND H/W - internal lug	0.25	2.375	0.125
11	R1	Line 1 pot. - shaft	0.8125	2.125	0.3125
12	R1	Line 1 pot. - tab	1.125	2.125	0.144
13	R2	Line 2 pot. - shaft	0.8125	0.625	0.3125
14	R2	Line 2 pot. - tab	1.125	0.625	0.144
15	S2	Function switch - shaft	1.875	2.125	0.375
16	S2	Function switch - tab	1.875	1.625	0.144
17	R3	Longwire Q pot. - shaft	1.875	1.0	0.3125
18	R3	Longwire Q pot. - tab	2.125	1.0	0.144

\*\*\*\*\*

## RIGHT SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	TA1	Phase Rev. Card - H/W 1	-0.875	1.25	0.125
2	TA1	Phase Rev. Card - H/W 2	-0.875	0.45	0.125
3	J4	RF out - BNC jack	0.0	0.5	0.375

\*\*\*\*\*

G1, G2 GROUNDING HARDWARE - EXPLODED VIEW

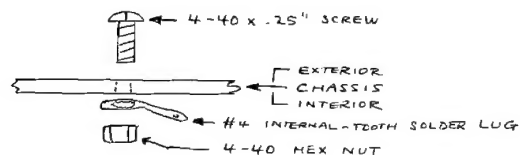


FIGURE 2 : TAI PHASE-REVERSING TRANSFORMER ASSEMBLY

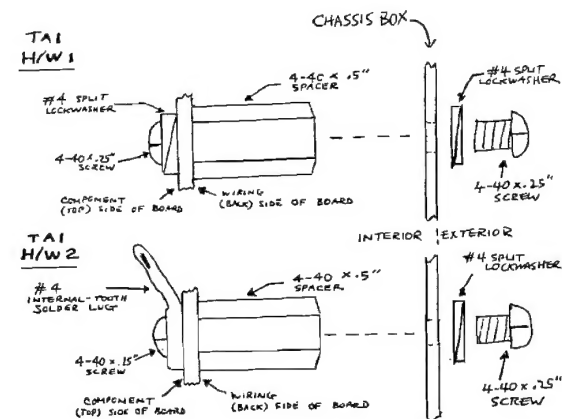
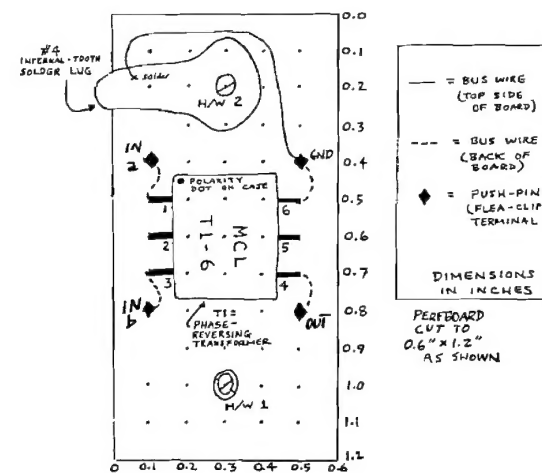
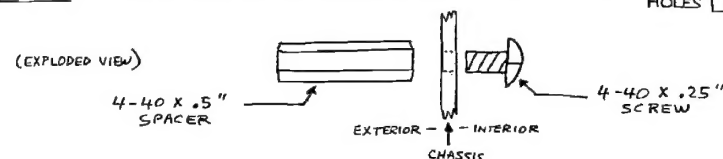


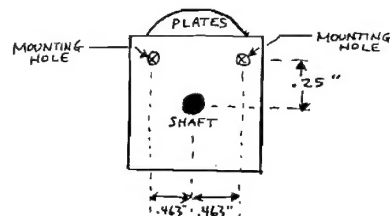
FIGURE 3 : VARIABLE CAPACITOR/VERNIER KNOB MOUNTING

STEP 1 : MOUNT SPACERS FOR VERNIER KNOB TO CHASSIS AT TOP SIDE HOLES 8, 9

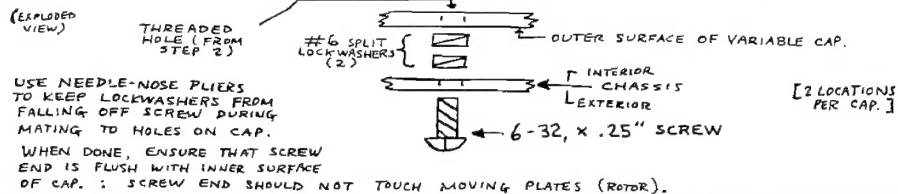


## FM Station Address Book

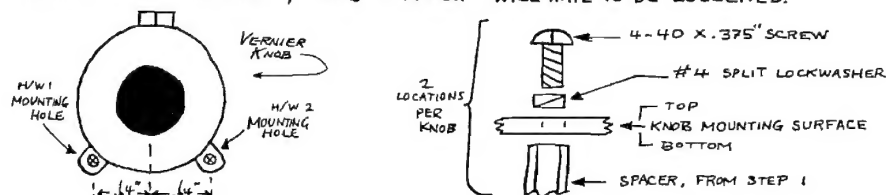
ONLY \$8.95 (Canada, US\$9.45) to the Pub Center (Foreign orders, please write for price)  
 • Listed by state, city • 8.5x11 inches, 3-hole punched • Full-size type



## STEP 3: MOUNT VARIABLE CAPACITOR IN ACCORDANCE WITH HOLE LIST



## STEP 4: MOUNT VERNIER KNOB ON SPACERS INSTALLED IN STEP 1 AND ON SHAFT OF TUNING CAP. INITIALLY, KNOB SETSCREW WILL HAVE TO BE LOOSENED.



## TOWER TIP

GA-1

WSB - 750 - ATLANTA



Submitted by: Eric Bueneman

WSB-750 uses one guyed tower in the middle of the Northlake Tower Festival Shopping Center. It is easily seen from I-285. WSB signed on the air in 1922. By 1934 it was operating with 50,000 Watts at 740 on the dial! It moved to 750 kHz in 1941 as part of a general overhaul by the FCC of the a.m. radio band.

Send information about a.m. broadcast towers in your area to John D. Bowker, 14 Canoe Brook Drive, Princeton Jct., NJ 08550. Include a simple map of the nearby highways and landmarks. Tell how many towers, how they are laid out, and any other information that will help in spotting each station.

## Bandscans

Chris Cuomo

670 Third Avenue  
Verona, PA 15147-1349

Audible stations from a DXer's location at given times.

Rick Dau	1110	WMBI	Chicago, IL	3
Iowa City, IA		KFAB	Omaha, NE	2
February 27, 1988 1:30pm-4:00pm		1120	KMOX St. Louis, MO	3
Kenwood K-1000, Radio West Loop		1130	KILJ Mount Pleasant	3
S-strong - 1-weak		1140	WVEL Pekin, IL	2
		1150	KCPB Burlington	3
540	4	1160	WJJD Chicago, IL	2
550	3	1170	KSTT Davenport	4
560	2	1180	WLDS Jacksonville, IL	2
KWTO Springfield, MO	2	1190	KDAO Marshalltown	3
570	3		WOWO Fort Wayne, IN	2
580	2	1200		
WLLL Urbana, IL *	3	1210		
WIBW Topeka, KS	2	1220	KOUR Independence	3
590	3	1230	WHRZ Moline, IL	4
600	5	1240	KBIZ Ottumwa	3
610	2		WSDR Sterling, IL	1
620	3	1250	KCFI Cedar Falls	3
630	2	1260	WEKZ Monroe, WI	2
640	4	1270	WKBF Rock Island, IL	4
850		1280	KCOB Newton	2
660	2	1290	KLEH Anamosa	3
670	4		WIRL Peoria, IL	2
680	2	1300	KGLO Mason City	2
690	1	1310	KOKX Keokuk	3
KSTL St. Louis, MO	2		WIBA Madison, WI	2
700	2	1320	KMAQ Maquoketa, IA	3
710	2	1330	WKLO Waterloo	2
720	4		WRAM Monmouth, IL	2
730	1	1340	KROS Clinton	3
740	4	1350	KRNT Des Moines	2
750	3	1360	KHAK Cedar Rapids	3
KJEL Lebanon, MO	1		KBBB Fort Madison	3
760	2	1370	KDTH Dubuque	3
770	2	1380	KCII Washington, IA	4
WAL Northfield, MN *	1	1390	KCLN Clinton	3
WEW St. Louis, MO	1		WGIL Galesburg	2
780	4	1400	KCOG Centerville, IL	1
790		1410	KGRN Grinnell	2
800	5	1420	WOC Davenport	4
810	1	1430		
820	3	1440	WGEM Quincy, IL	2
830	1		WROK Rockford, IL	2
840	2	1450	KCDR Cedar Rapids	4
850	4	1460	KSO Des Moines	2
860	2	1470	WMBD Peoria, IL	2
870	3	1480	KLEE Ottumwa	3
880	3	1490	KBUR Burlington	3
890	5		WDBQ Dubuque	3
900	2	1500	WGEN Geneseo, IL	2
910	3	1510	WLRB Macomb, IL	2
920	3	1520	KOLM Rochester, MN	1
930	3	1530		
940	3	1540	KXEL Waterloo	4
950	2	1550		
960	3	1560	KCJJ IOWA CITY	5
970	2	1570	KHCD Fairfield	2
980	3	1580		
990	3	1590	WAIK Galesburg, IL	2
1000	3	1600	KCRG Cedar Rapids, IA	5
1010	2			
1020	3			
1030				
1040	4			
1050	2			
1060	3			
1070	2			
1080	2			
1090	3			
1100	1			

AM STEREO

KFGO 790

KFGO RADIO • P.O. BOX 2966 • FARGO, ND 58108-2966

Rick Dau  
Lake Okoboji, Arnolds Park, IA  
April 22, 1989 3:30pm-6:00 pm  
Ford car radio  
5-strong - 1-weak  
(Rick, what did the asterisks  
mean? -CC)

540 KWMH Fort Dodge 4  
550 KFVR Bismarck, ND 2  
560  
570 WNAX Yankton, SD 4  
580 WIBW Topeka, KS 2  
580 WOW Omaha, NE 3  
600 WMT Cedar Rapids 2  
610  
620 KMNS Sioux City 4  
630  
640 WOI Ames \* 3  
650  
660 KCRO Omaha, NE 3  
670 WMAQ Chicago, IL 1  
680 KFEQ St. Joseph, MO 2  
690 KUSD Vermillion, SD \* 3  
700  
710 WHB Kansas City, MO 1  
720  
730 KWOA WORTHINGTON, MN 5  
740  
750  
760  
770 WCAL Northfield, MN 3  
780 WJAG Norfolk, NE 3  
790 KFGO Fargo, ND 2  
800 KQAD Luverne, MN 4  
810 KCHO Kansas City, MO 1  
820  
830 WCCO Minneapolis, MN 4  
840 KWPN West Point, NE 3  
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860 KNUJ New Ulm, MN  
870  
880 KRVN Lexington, NE 2  
890 KQLX Lisbon, ND 2  
900 WLS Chicago, IL 1  
910 KJSK Columbus, NE 3  
920 KTIS Minneapolis, MN 2  
930 KJJQ Volga, SD 3  
940 KDHL Fairbault, MN 3  
950 KSDN Aberdeen, SD 3  
960 KIOA Des Moines 2  
970 KWAT Watertown, SD 3  
980 KMA Shenandoah 2  
990 KQHR Austin, MN 3  
1000 WDAY Fargo, ND 2  
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1030 KAYL Storm Lake 3  
1000 KXRB Sioux Falls, SD 4  
1010 KLSS Mason City 3  
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1040 WHO Des Moines 3  
1050 KLOH Pipestone, MN 4  
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1070 KILR ESTHERVILLE 5  
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1090 KVDB Sioux Center, IA 3  
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1110 KFAB Omaha, NE 3  
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1130 WGGY Minneapolis, MN 3  
1140 KSOG Sioux Falls, SD 4  
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1170 KOWD Waseca, MN 2  
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1190 KROJ JACKSON, MN 5  
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1210 KOKK Huron, SD 3  
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1240 KICD SPENCER 5  
1250 KFGG Boone 2  
1260 KDUZ Hutchinson, MN 2  
1270 KNWC Sioux Falls, SD 3  
1280 KCOB Newton 2  
1290 KBMO Benson, MN 3  
1300 KGLO Mason City 3  
1310 KDLS Perry 2  
1320 KELO Sioux Falls, SD 4  
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1340 KWLM Willmar, MN 3  
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1360 KCSJ Sioux City 4  
1370 KSUM Fairmont, MN 3  
1380 KCLM Carroll 3  
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1400 KVPD Fort Dodge 3  
1410 KMHL Marshall, MN 3  
1420 KLEM Le Mars 4  
1430 KTOE Mankato, MN 3  
1440 KBRK Brookings, SD 3  
1450 KASI Ames 2  
1460 KCHE Cherokee 2  
1470 KATE Albert Lea, MN 3  
1480 KDMA Montevideo, MN 3  
1490 KSO Des Moines 2  
1500 KWSL Sioux City 4  
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1520 KLSR Redwood Falls, MN 3  
1530 KRIB Mason City 2  
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1550 KMSD Milbank, SD 2  
1560 KOLM Rochester, MN 2  
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1580 KXEL Waterloo 3  
1590 KIWA Sheldon 4  
1600 KBEW Blue Earth, MN 3  
1610 KVRA Vermillion, SD 2  
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